Case 2976

Holotropis herminieri Duméril & Bibron, 1837 (currently Leiocephalus herminieri) and Proctotretus bibronii T. Bell, 1842 (currently Liolaemus bibronii) (Reptilia, Squamata): proposed conservation of the specific names

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Abstract. The purpose of this application is to conserve the specific names of the tropidurid lizards *Leiocephalus herminieri* (Duméril & Bibron, 1837) and *Liolaemus bibronii* (T. Bell, 1842). The former (now extinct) is known from Martinique, whilst the latter is a southern South American species. The names are threatened by the senior subjective synonyms *Tropidolepis aculeatus* and *T. bellii* respectively, both of Gray (1831), which have only once (in 1834) been used.

Keywords. Nomenclature; taxonomy; Reptilia; tropidurids; Leiocephalus herminieri; Liolaemus bibronii; Martinique; southern South America.

- 1. Gray (1831, pp. 42–44) recognized ten species in the genus *Tropidolepis* Cuvier, 1829. Six of these were the species included by Wiegmann (1828, cols. 369–370) in his genus *Sceloporus*. Three of the species were new and each was accompanied by a description.
- 2. One of the new species, *Tropidolepis aculeatus* Gray, 1831 (p. 43), was said to be from Martinique and its brief description agrees with the characteristics of *Holotropis hermitieri* Duméril & Bibron, 1837 (p. 261, pl. 44), the only member of the family TROPIDURIDAE on the island. Gray did not mention a specimen or the location of material.
- 3. For the remaining two of Gray's (1831) species, *Tropidolepis bellii* and *T. fasciatus*, no locality was given. Both were said to be represented in the Bell Museum, most of the collection from which was subsequently incorporated into the British Museum, London, although some specimens are in the Muséum National d'Histoire Naturelle, Paris. However, no specimens listed in British Museum catalogs by either Gray (1845) or Boulenger (1885) can be associated with these names. The specimens may be in the Paris Muséum but at present are unaccounted for. The descriptions, without locality or specimens, are inadequate for unequivocal allocation to species.
- 4. The only subsequent usage of the three species-group names *Tropidolepis aculeatus*, *T. bellii* and *T. fasciatus* was in Wiegmann (1834), where each taxon was

listed as a member of the genus *Sceloporus* Wiegmann, 1828. None was cited in the appropriate synopses by Duméril & Bibron (1837), Gray (1845) or Boulenger (1885), although each work cited Gray (1831) in other contexts. Gray himself never subsequently referred to his (1831) new species. These omissions have resulted in the (1831) Gray names remaining unused by other workers.

- 5. The name *Tropidolepis aculeatus* Gray, 1831 is clearly referable to the species consistently known as *Leiocephalus herminieri* (Duméril & Bibron, 1837) and is senior to the latter name. Rigid application of the Principle of Priority would result in the earlier name becoming valid. However, revival of Gray's name, unused for over 160 years, would be an unacceptable violation of nomenclatural stability. The name *L. herminieri* has been used by Boulenger (1885, p. 166, who cited three works by four authors), by Etheridge (1964, p. 56, who cited three additional works by four additional authors), and by Etheridge (1966a, p. 56; 1966b, p. 88), Schwartz & Thomas (1975, p. 130), and Schwartz & Henderson (1988, p. 137; 1991, p. 430). No other name has been applied to the taxon since 1837.
- 6. The only specimens known of *Holotropis herminieri*, which is now extinct, are the three syntypes in the Paris Muséum, and a skeleton in the Natural History Museum, London. Two of the specimens in Paris, MNHN 1826 and 6829, are labelled 'La Martinique'; the third, MNHN 2389, is labelled 'Trinité' (a town on the northeastern coast of Martinique); the skeleton in London, BMNH 1952.12.3.10, is also labelled 'Martinique' (see Etheridge, 1964, p. 56, footnote). Gray (1831) described the pointed scales of *T. aculeatus* and his description was therefore presumably based on one or more of the three specimens in the Paris Muséum, although Duméril & Bibron themselves (1837, p. 263) noted that they had seen material in both museums and thought that *T. herminieri* was a junior synonym of Gray's (1827) *Leiocephalus carinatus* from Cuba. No other specimens are known on which Gray might have based his description of *T. aculeatus*.
- 7. Gray's (1831) Tropidolepis bellii and T. fasciatus were based on Bell Museum specimens and probably pertain to South American taxa. The well known South American polychrid species Leiosaurus bellii (pp. 242–244, pl. 39, fig. 1) and L. (currently Pristidactylus) fasciatus (pp. 244–246) were described by Duméril & Bibron (1837). Neither of the descriptions of these taxa agrees with Gray's of 1831. Gray (1845, p. 224) and Boulenger (1885, p. 127) later cited Leiosaurus fasciatus Duméril & Bibron (originally described by d'Orbigny & Bibron in 1837) as 'S. America. Mus. Paris' and 'Rio Negro, N. Patagonia' respectively. The discrepancies in the descriptions of Gray's (1831) T. fasciatus and d'Orbigny & Bibron's (1837) L. fasciatus mean that Gray's taxon cannot be identified as d'Orbigny & Bibron's species. The name T. fasciatus Gray must be considered a nomen dubium and, to avoid confusion with L. fasciatus d'Orbigny & Bibron, we propose that it be suppressed. Gray (1845, p. 224) and Boulenger (1885, p. 125) also cited Leiosaurus bellii Duméril & Bibron, 1837 and listed a specimen from South America.
- 8. Gray (1845, p. 212) described a nominal species *Liolaemus bellii* and listed a single specimen from Chile. It is likely that Gray's (1831) *Tropidolepis bellii* is the same as his (1845) *L. bellii* since the two descriptions are reasonably similar. As noted by Boulenger (1885, p. 146), the name *Liolaemus bellii* Gray, 1845 is a junior synonym of *Proctotretus bibronii* T. Bell, 1842 (p. 6, pl. 3, fig. 1), described from a young female specimen (BMNH 1946.8.5.68 in the Natural History Museum,

London) collected by Charles Darwin from Port Desire, Patagonia. The dates of publication of part 5 of *The zoology of the voyage of H.M.S. Beagle* were set out by Vanzolini (1977, p. 61); pp. 1–16 were published in 1842 and the remainder in 1843. The specific name of *Liolaemus bibronii* has been consistently applied to the southern South American iguanid species and has been used in recent representative works by Peters & Donoso-Barros (1970, p. 180), Cei (1986, pp. 256–258, pl. 28) and Frank & Ramus (1995, p. 168). The numerous references in Donoso-Barros (1966, pp. 204–207) demonstrating usages of the name, and the number of articles using it in the compilation by Duellman (Ed., 1979), provide ample evidence of its fixity. The earlier name *T. bellii* Gray, 1831 constitutes a threat to the nomenclatural stability of *L. bibronii* and we therefore propose that it be suppressed.

- 9. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) aculeatus Gray, 1831, as published in the binomen Tropidolepis aculeatus;
 - (b) bellii Gray, 1831, as published in the binomen Tropidolepis bellii;
 - (c) fasciatus Gray, 1831, as published in the binomen Tropidolepis fasciatus;
 - (2) to place on the Official List of Specific Names in Zoology the following names: (a) *herminieri* Duméril & Bibron, 1837, as published in the binomen *Holotropis*
 - (b) bibronii T. Bell, 1842, as published in the binomen Proctotretus bibronii;
 - (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) aculeatus Gray, 1831, as published in the binomen *Tropidolepis aculeatus* and as suppressed in (1)(a) above;
 - (b) *bellii* Gray, 1831, as published in the binomen *Tropidolepis bellii* and as suppressed in (1)(b) above;
 - (c) fasciatus Gray, 1831, as published in the binomen *Tropidolepis fasciatus* and as suppressed in (1)(c) above.

References

herminieri:

- Bell, T. 1842. Reptiles. Pp. 1–16 in Darwin, C. (Ed.), The zoology of the voyage of H.M.S. Beagle, under the command of Captain Fitzroy, R.N., during the years 1832–1836, part 5. Smith, Elder, London.
- Boulenger, G.A. 1885. Catalogue of the lizards in the British Museum (Natural History), Ed. 2, vol. 2. xiii, 497 pp., pls. 1–24. Taylor & Francis, London.
- Cei, J.M. 1986. Reptiles del centro, centro-oeste y sur de la Argentina. Herpetofauna de las zonas áridas y semiáridas. 527 pp., 48 pls. Monografie 4. Museo Regionale di Scienze Naturali, Torino.
- Donoso-Barros, R. 1966. Reptiles de Chile. cxlvi, 458 pp. Universidad de Chile, Santiago de Chile.
- Duellman, W.E. (Ed.). 1979. The South American herpetofama: its origin, evolution, and dispersal. 485 pp., 172 figs. Monograph of the Museum of Natural History, University of Kansas, No. 7. Museum of Natural History, University of Kansas, Lawrence, Kansas.
- Duméril, A.M.C. & Bibron, G. 1837. Erpétologie générale ou histoire naturelle complète des reptiles, vol. 4. 572 pp. Roret, Paris.

Etheridge, R. 1964. Late Pleistocene lizards from Barbuda, British West Indies. Bulletin of the Florida State Museum, Biological Sciences, 9(2): 43–75.

Etheridge, R. 1966a. An extinct lizard of the genus Leiocephalus from Jamaica. Quarterly Journal of the Florida Academy of Sciences, 29(1): 47–59.

Etheridge, R. 1966b. The systematic relationships of West Indian and South American lizards referred to the iguanid genus *Leiocephalus*. *Copeia*. 1966(1): 79–91.

Frank, N. & Ramus, E. 1995. A complete guide to scientific and common names of reptiles and amphibians of the world. 377 pp. NG Publishing, Pottsville, Pennsylvania.

Gray, J.E. 1827. A description of a new genus and some new species of saurian reptiles, with a revision of the species of chameleons. *Philosophical Magazine*, (2)2(9): 207–209.

Gray, J.E. 1831. A synopsis of the species of the class Reptilia. Vol. 9 (supplement) in Griffith, E. & Pidgeon, E. (Eds.), The animal kingdom arranged in conformity with its organization, by the Baron Cuvier, with additional descriptions of all the species hitherto named, and of many not before noticed. 110 pp. Whittaker, Treacher, London.

Gray, J.E. 1845. Catalogue of the specimens of lizards in the collection of the British Museum.

xxviii, 289 pp. Taylor & Francis, London.

Peters, J.A. & Donoso-Barros, R. 1970. Catalogue of the neotropical Squamata: part 2. Lizards and amphisbaenians. *Bulletin of the United States National Museum*, **297**: 1–293.

Schwartz, A. & Henderson, R.W. 1988. West Indian amphibians and reptiles: a check-list. Milwaukee Public Museum Contributions in Biology and Geology, 74: 1–264.

Schwartz, A. & Henderson, R.W. 1991. Amphibians and reptiles of the West Indies. xvi, 720 pp. University of Florida, Gainesville.

Schwartz, A. & Thomas, R. 1975. A check-list of West Indian amphibians and reptiles. Carnegie Museum of Natural History Special Publication, 1: 1–216.

Vanzolini, P.E. 1977. An annotated bibliography of the land and fresh-water reptiles of South America (1758–1975). vol. 1 (1758–1900). iv, 186 pp. Museo de Zoologia, São Paulo. Wiegmann, A.F.A. 1828. Beyträge zur Amphibienkunde. Isis (von Oken), 21(3–4): 364–383.

Wiegmann, A.F.A. 1834. Herpetologia Mexicana ... Pars Prima. Saurorum species. vi, 54 pp., 10 pls. Lüderitz. Berlin.